

A. M. R. A.

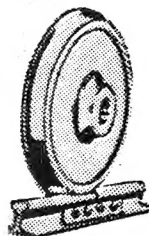
AUSTRALIAN MODEL RAILWAY ASSOCIATION

JOURNAL



PRICE 30 cents.

Registered at the G.P.O. Melbourne for transmission by
post as a Periodical (Category B).
Not for sale to the public.
Issued to financial members only.



NUMBER
90

JAN/FEB
1971

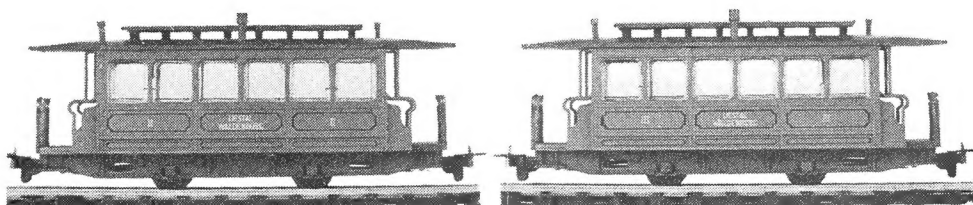
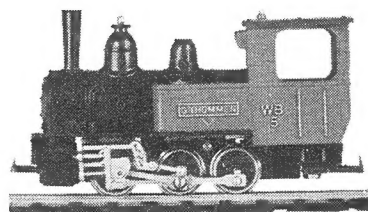
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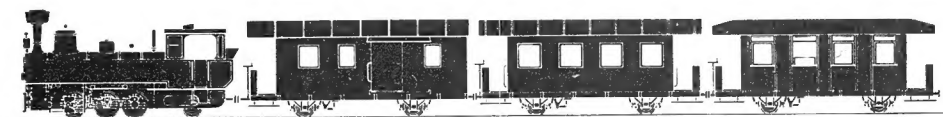
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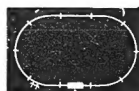
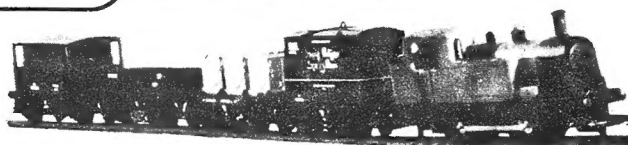
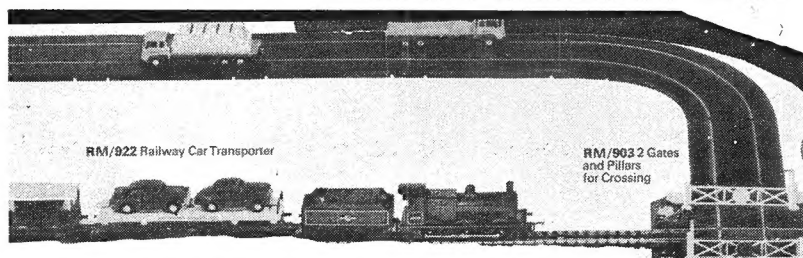
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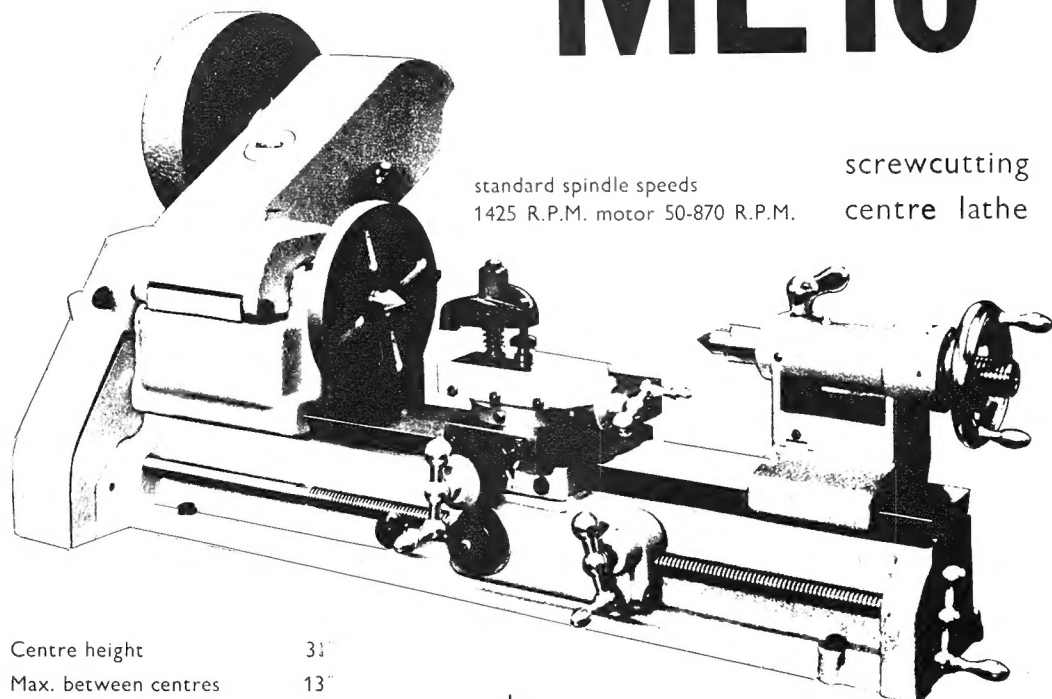
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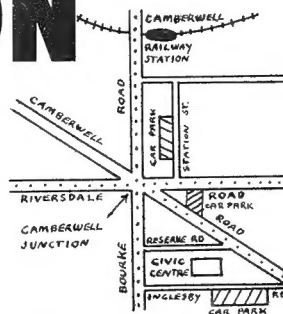
We are open on Saturday morning.

ALL MODEL RAILWAY EXHIBITION



CAMBERWELL CIVIC CENTRE

Camberwell Road CAMBERWELL



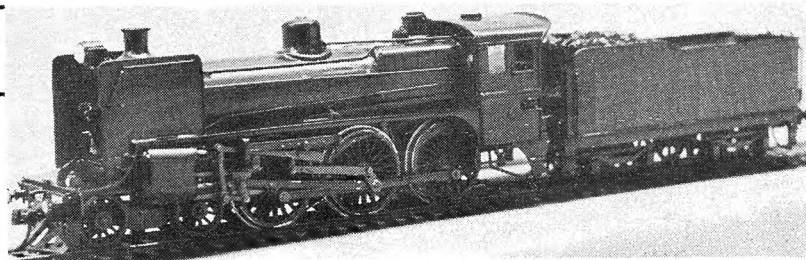
5th, 6th, 7th, 8th, MARCH, 1971

Friday	10.00 a.m. - 9.00 p.m.
Saturday	9.00 a.m. - 10.00 p.m.
Sunday	10.00 a.m. - 8.00 p.m.
Monday	9.00 a.m. - 8.30 p.m.

LET'S GET TOGETHER AND HAVE FUN WITH TRAINS

Exhibition to be officially opened at 2.30 p.m. on Friday by Mr. K. A. Smith
O.B.E., B.E., M. Inst. T., A.M.I.E. Aust., M.I. Mech. E (Eng.), Commonwealth
Railways Commissioner.

WORKING
MODEL
LAYOUTS



STATIC
DISPLAYS

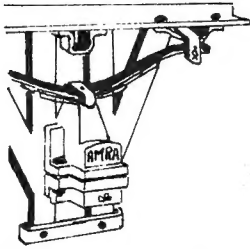
ADULTS 40¢

School children **20¢**
All pensioners

Under five years of age - FREE

Exhibition organised by the Victorian Branch of the Australian Model Railway
Association in conjunction with the Moomba Festival.

ENQUIRIES - 615-2738, 36-8829, A.H. 87-3953



Editorial

JOURNAL BOX

It is heartening to see that our membership is slowly increasing, and it would appear that our percentage of renewals is also increasing.

There must still be many members who do not find it convenient to attend Branch meetings. Every so often I get a letter in this vein, and to all members new and old I suggest that they either form a sub-branch or join up with an existing one.

The membership list is not just in Journal to fill up space, or even to list all our members. It is also there for your use, so that you can visit that member near you, and so get together and have fun.

Whilst on the subject of Journal, my "in basket" is nearly empty again I have quite a few "fillers", but not many articles. Perhaps I will fill the next Journal with "fillers" and not articles. To those of you who have contributed material which I have not acknowledged, I must apologize. Somewhere in the pile is your letter which I will answer as I find it.

The easiest way to remember our deadlines is that when you receive your Journal you should immediately send me that material you want published in the next issue. I welcome articles any time, for if I have a stock, it makes the balancing of the pages so much easier.

COVER PHOTO:

4513 heads a down goods through Newbridge on 5th December 1969.

Photo: A. Templeman.

Volume 20

Issue 90

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CREDITS

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Cover Design	Heather Gregg.
Typing	Dot Treseder.
Printing	Maskell and Blake, Korumburra, Vic. 3950.

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President's

Corner



Federal President's Annual Report delivered at Annual Meeting held 27th November 1970 at AMRA NSW Clubrooms Rockdale, N.S.W.

During the year your Committee of Management has concerned itself with two main issues: membership and a twenty first Anniversary Convention.

I am pleased to report that membership at November 1970 meeting stood at 396 compared to 326 in November 1969; figures for October 1970 were 344 compared to 284 in October 1969.

Renewals are coming in more quickly which certainly justifies the policy pursued by your immediate past President, Bruce Lovett. The policy of refunding 20c per renewal for the 2 months period after September appears to be both an incentive to members and an advantage to the State or State Branch concerned.

Much as the Committee of Management can do, it is still little compared to what can be attained by each member trying for ONE NEW MEMBER.

During the year, your public relations officer and vice-President, Keith Wilcox, has given a lot of time and consideration to AMRA holding a twenty-first birthday convention in 1972. Keith has settled on the venue Melbourne during Easter 1972 and has received excellent co-operation from the Victorian Branch. He has not, so far, received a lot of co-operation from members interested in attending.

The economics of running an Association such as ours are constantly in the minds of your Committee. Increases in postage charges are becoming a serious threat to the delicate balance on which the Association's affairs are poised.

Serious consideration must be given by the new Federal President and his Committee of Management to the relationship between the costs of running the Association and the rate of subscription.

This report would not be complete without my thanks to all members of the Committee of Management whose loyal support and co-operation throughout the year has rendered my task easy indeed.

I do thank all members of the Association for their support.

RUPERT ACKLAND.

NOTICE.

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YOUR C.O.M. CLUB REGISTER

The elected Committee of Management for 1970/71 is:

President	Rupert Ackland
Vice-President	Keith Wilcox
& P.R.O.	
Secretary	Norm Read
Treasurer	Keith Robinson
Registrar	June Dunn
Committee	Brian Day
	John Koole
	John Dunn

The Publishing Sub-Committee is:

Editor	Rex Little
Publisher	Jack Treseder
Advertising Manager	Mal Baker

To ease the work of the Federal Secretary, members of the C.O.M. have offered their services as State Representatives and are listed below:

Victoria	Brian Day
N.S.W.	Rup Ackland
Queensland	Keith Wilcox
S.A. & N.T.	John Koole
W.A.	Keith Robinson
Overseas	John Dunn

The idea of having State Representatives is that members can direct their correspondence regarding policies, ideas for the betterment of the Association, etc., to them thus relieving the Federal Secretary.

CONTRIBUTIONS FOR JOURNAL

Articles and items of interest for Journal at any time. Letters for inclusion in Pop Valve should reach the Editor by the middle of the even month.

Would any member who knows the name and address of the Secretary of any of the following model railways clubs, please forward it to Graham Watson, 4 Dicks Street, Albany, W.A. 6330.

N.S.W.

1. Western Model Railway Association.
2. Sutherland Model Railway Society.
3. Central Coast Club.
4. Parramatta Districts Model Railway Club.

Victoria

1. Bendigo Model Railroaders.
2. Diamond Valley Railway.
3. Prahran Junior Modellers.

Queensland.

1. Toowoomba Society of Model and Experimental Engineers.

Shop Spy

For H0n3½ modellers, Austral Modelcraft, 101 Laura Street, Ikabin, Queensland, have H0n3½ kits of Queensland Railways CO class box cars, also stocked are Friedmont, M.R.C. and Prototype kits of Australian prototype.

For Sn3½ modellers, The Iron Horse, 33 Lowerson Street, Lutwyche, Queensland, have New Zealand wagon kits in S scale, they are four wheelers. Three types are available, open wagon, covered van and cattle wagon. They are priced about \$1.20 per kit. They are beautiful kits for the price. They have a large range of second hand Triang, Hornby Dublo and Triang T.T. gauge. If you are looking for something in these lines, write to them as they may have just what you have been looking for.

The first loco you can build

by IVAN LASZLO.

Dear Reader; this is a loco building project with a difference. The difference is that you can build your own loco based on this article, enjoy doing it and whet your appetite for further projects. The loco will fit in with any layout, you cannot buy a similar one in the shops, it is quite cheap, and you do not need a lathe or special skills. Should you build the loco described, you will have a whale of a time and the project could lead you to better things.

I have built a number of locos over the years and I have found that the most difficult part is to build a main frame to suit specified problems. I have overcome these problems in ways which might interest you, but which will not be explained here as they form the basis of another article. My main argument however, is that you should never build an exact replica, but rather build something which may have been based on sound principles. In this way one can find enjoyment and yet not be the slave of designs which to us are not quite clear. I have built a few outside frame locos, a difficult but nevertheless very enjoyable task. Lately I have had a problem which I am about to tell you and you may wish to try the result yourselves.

My layout is called the "New England Railways" and is set in New England in northern N.S.W. In my imagination there is a mainline and the planned or hoped for lines which have never been built. My favourite amongst these is the narrow or standard gauge line which was once planned to go out from Tamworth to Nundle. Nundle is a small town about 42 miles away on the upper reaches of the Peel River where once gold was mined. To-day the main in-

dustry is the production of lucerne and beef cattle. It is lovely country, and if I were starting in the hobby today I would model it in an HO gauge - preferably 2'6". However I am afraid it is now too late for that.

Those of you who have travelled on the New England Highway, may have been up or down the forbidding Moonbi Ranges. The road now follows a different route to the railway, but the old dirt road is still there - still as it was in the colonial days. At the start of the rise is the Kootingal railway station and some 8 to 9 miles away in the foothills is the tiny settlement and station of Limbri.

In my own world of model railways, I have always envisaged the line from Nemingha to Nundle, with a branch to Ogunbil. This line has another series of branches - all laid on very light rails and owing to the chronic inefficiency and insolvency of the New England Railways, (that's me) it uses hand-me-down equipment from all over the world. It also uses some pretty horrible examples of last century's locomotives, which survive nowhere else in the world, but here. Shortly I will be building an Engerth type loco which has not been built since 1865!! In these circumstances, one has to either build or "obtain" locos for the line.

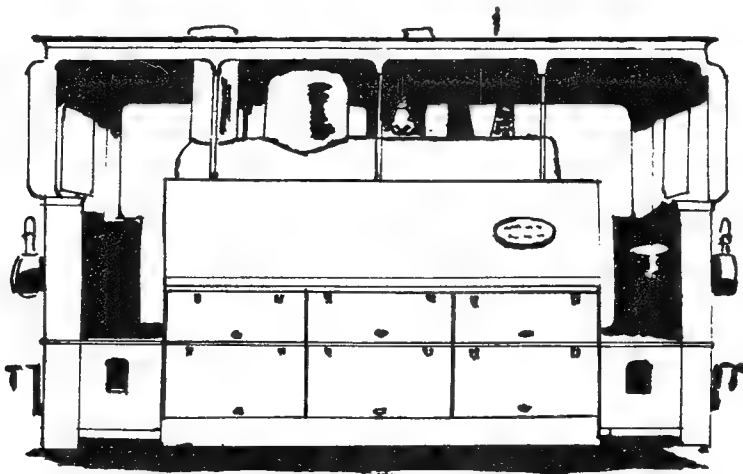
From Limbri through Mulla Creek there is a branchline to Dungowan Junction. This branch line is laid with 24 lb. rail. Its maximum speed is 20 m.p.h. In my scheme it needed a cheap loco quickly. So I made a steam tram. A what - a steam tram, or if you like, a steam loco which is built up to have a body like a tram.

Now, to do this, one only needs a plan of several different steam trams. Not for copying, but for ideas. Steam trams were generally much the same. They had a body with a deep skirt, to cover the outside motion, otherwise children, cattle, cats and dogs may inadvertently have been hurt, a waistline body with window frames, but seldom any windows and a roof over the whole thing. Several geegaws, such as a chimney or smokestack, a bell, perhaps a cowcatcher fore and aft, a smokebox door, steps, a water tank hatch, a cooler, some arrangement for coaling

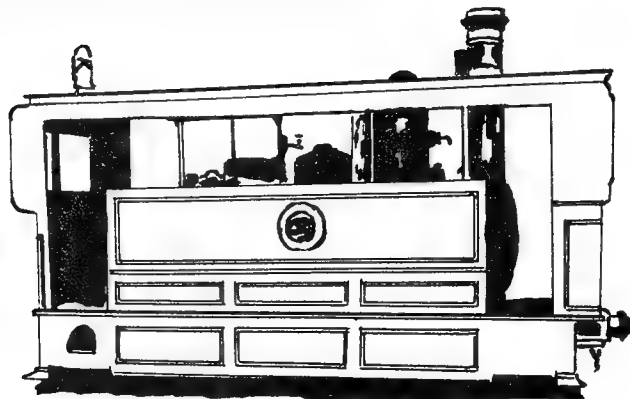
and perhaps a compressor were strung around it. None of these are really essential on the model.

To make the model, you proceed in two parts:

First the motive power, Here you need a motor bogie - any kind of motor bogie, preferably, but not necessarily a short wheelbase one. No side frames are necessary, just a motor bogie which works and has places for fixing a body to it. I used a Fleischmann bogie as I get them cheaply from Germany, but any bogie will do.



Type
TVFM-5
Built
1904



Type
ZNSM7
Built
1893

Reproduced from photographs of Dutch Steam Trams

*P
9/10*

Secondly the body. This is roughly measured round the motor bogie, but should not be more than about 30 mm. wide. The overall height is about 40 mm. of which about 12 mm. is the skirt-
ing, 12 mm. is the body waist proper, 8 mm. for the windows, 2 mm. for the fascia, 2 mm. for the roof curve and about 2 mm. of the wheels above the rail shows. Of course the whole thing can be altered to suit the bogie used. In the front and rear there may be two or three windows and three or four along the sides.

Construction is simple. First one has to make the main sides and the two ends. I would suggest that the two ends should be about 26 mm. wide and about 20 mm. high. The ideal material is brass, but you can use anything else including perspex. As some weight is

required, metal is preferable, brass about $\frac{1}{8}$ " thick, so that the sides can be soldered to it. The sides should be as long as the bogie requires for comfortable fitting and of about 1 mm. thick material. When you solder all these together you get an open box, which fits snugly over the bogie. This box is not going to be seen, as the body proper is going to be constructed round it. At this stage one must make some provision for mounting it to the bogie, and some provision for couplers and buffers. You can either have only a centre buffer and a match truck, or the more conventional two buffers and couplers.

The next thing which goes on it is the window frames, (remember you don't have to have windows) to hold up the roof. In the four main corners I

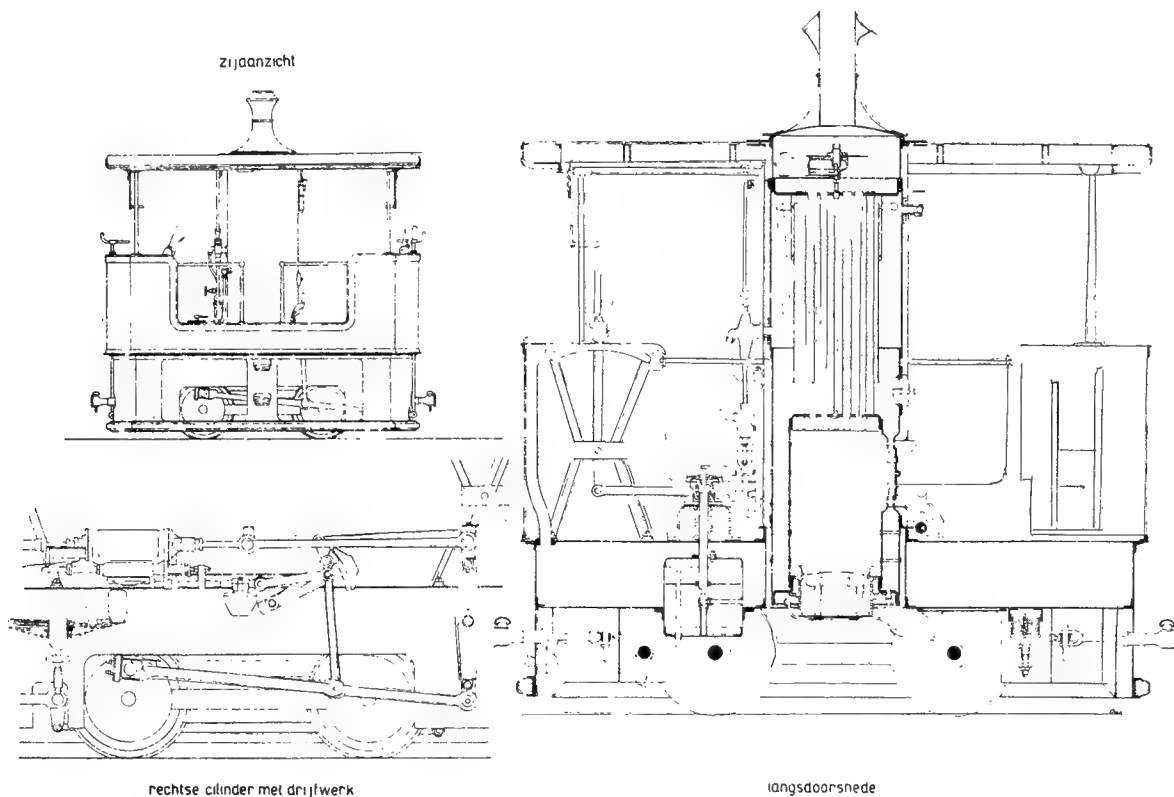


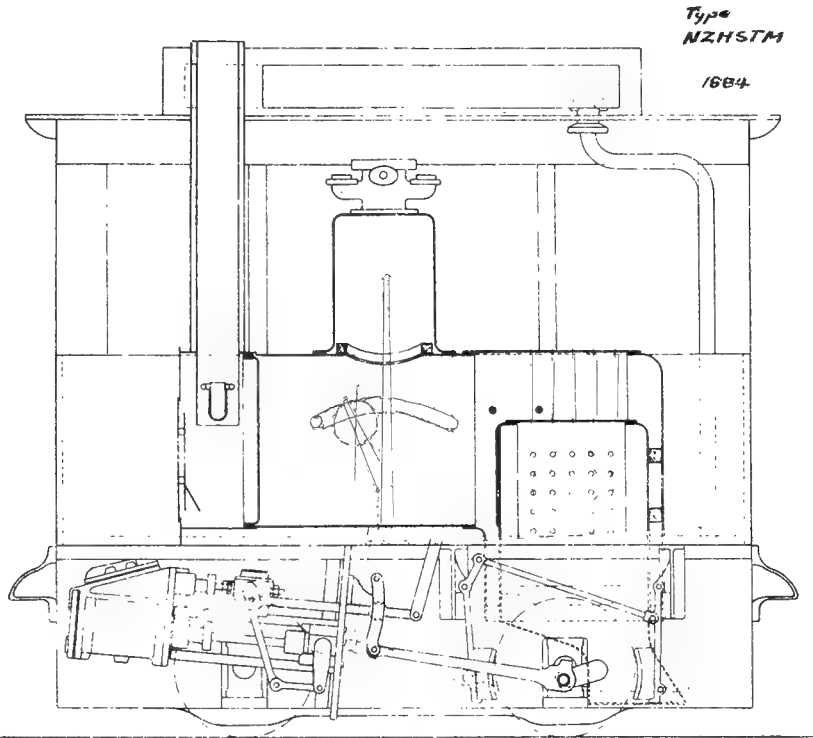
Fig. 19. Locomotief OGB 1—2 in oorspronkelijke toestand.

(Tekening S. Overbosch)

suggest you use short lengths of scrap rail, about 15 mm. long, soldered on. I prefer to use silver solder up to this stage, but soft solder or epoxy resin will do. However if you solder the rails on to support the roof, then I suggest that the box should also be screwed so that it does not come apart.

The window division need not be symmetrical - but please yourself and for these you can use a stiff brass or steel wire. I use pivot steel (blue steel) which is obtainable from watchmakers supply houses, or your watchmaker may help here. The pivot steels are very fine and excellent quality steel and it is a pleasure to use them. However you have to anneal them, as for some reason they come hardened.

The roof is the next step. This is quite often a wave type, that is the centre rises and so do the sides (forming gutters) like a W. On the prototype these are often quite crude, being made of bits of roofing iron welded together. Thus you can use a piece of bent brass and cover it with plastic tape to give weld seams. Under the edge there is a "barge board" which can be made of pieces of shim metal or even bristol board cut to suit the contours and glued on. This narrow strip, about 2 mm. wide, just below the eaves can of course have your road name written on it. For example Bindibilli - Whitehorse - Bunjiappa Tramway, or something like that to suit yourself.



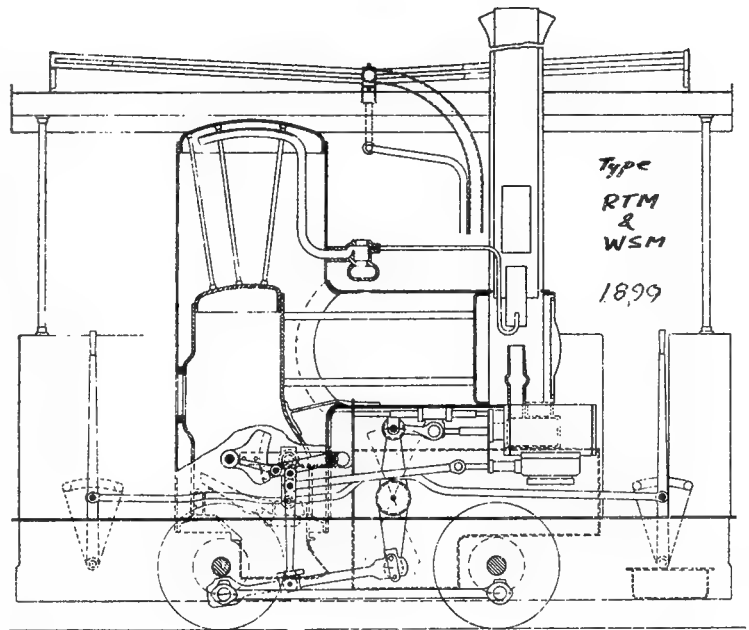
The sides below the windows are made up of two separate skirtings. The lower one (to hide the works) is about 12 mm. high, and this is divided into flaps. There are about five flaps on each side, not the same lengths. One to reach the cylinders, one to reach the cross heads, two to reach the drivers and one to reach the motion. Each one can be raised independently to look at the part you wish to oil, or hit with a hammer, etc., while the rest are closed. In practical terms this means that you divide the sides of the box in half with a double line scribed all round and then scribe another double line at the bottom the length of the flaps. These double lines serve as a guide to glue on some "riveted" shim brass. I make these "rivets" by putting the shim brass in the typewriter and type dots.....or ::::::: and then cut out the strips of "rivets".

The waistline skirting above the flaps is just a few slabs welded together, seams showing. For these I use a plastic material which is made in Australia, called "Insulyt". This material is excellent to work, can stand the heat of soldering and takes paint very well. Another piece is used for the driver's door.

The front and rear are similar, but not quite the same. The front has a smokebox door glued on, whilst the rear (where the driver is) has to have an entrance on one side, with some means of getting to it, either some steps or a ladder.

Both ends have the bottom skirt, the continuation of the flaps, and the top continuation of the body waist. You can add lamps and cowcatchers according to taste and a brass whistle either on the front or the top.

The roof must have a chimney, usually a tall thin affair, for character and to keep the sparks off the ground. On steam tram lines weeds are usually encouraged, as they anchor the ground if there is no ballast, although sometimes there is ballast - usually river gravel. On the roof you can also put a condenser-cooler. This can be easily made from a stack of staples (say a dozen) soldered together on one end of a piece of brass. A compressed air tank for the brakes can be fashioned from a piece of 1/4" mild steel or brass, or even a piece of dowel. The tanks often had bands of flat iron round them, so these can be added also. The whistle can be mounted on the roof and will look realistic with a piece of nylon fishing line strung along to the drivers section. You can add a water



tank hatch and a coal bin. Coal was usually gravity fed to the vertical boiler. The roof was often used to carry goods, so if you wish you can add a few milk cans, some passengers luggage, even a dog box or a chicken coop. I have seen all these things on the real thing, it does not get hot on the roof as it is air cooled like the VW.

Painting is to your taste - dirty, smokey and unkempt. The whole thing has a character which otherwise may be missed and you can doll it up. Please however, no vacuum brakes, no feedwater heater and no superheater - these were never found on steam trams.

So there you are, This is a loco which you can make in several varieties, big ones, little ones, etc. and then you can graduate to steam railcars with and without motion, then galloping hares and then to a simple tank loco. This as a first off loco is a pleasure to make because you are not bound by convention and whatever you do is likely to be correct to prototype, somewhere,

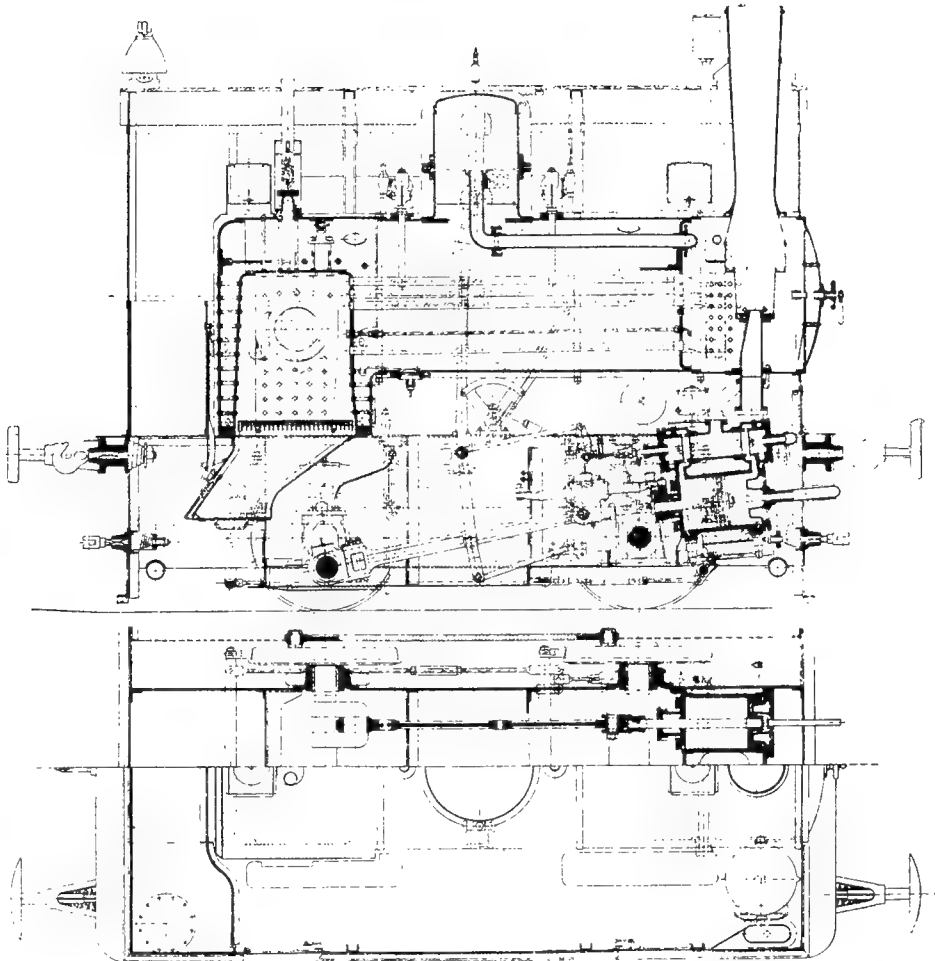


Fig. 64. Locomotief WSM 15-20 in oorspronkelijke toestand.

sometime. The loco can even drag its little train, or shunt and it could start you off making something out of this hobby.

You may end up building locos yourself, but in this case the fun of it is that you don't have to worry - it will work (as long as your motor bogie

works) and you can enjoy yourself by dolling it up.

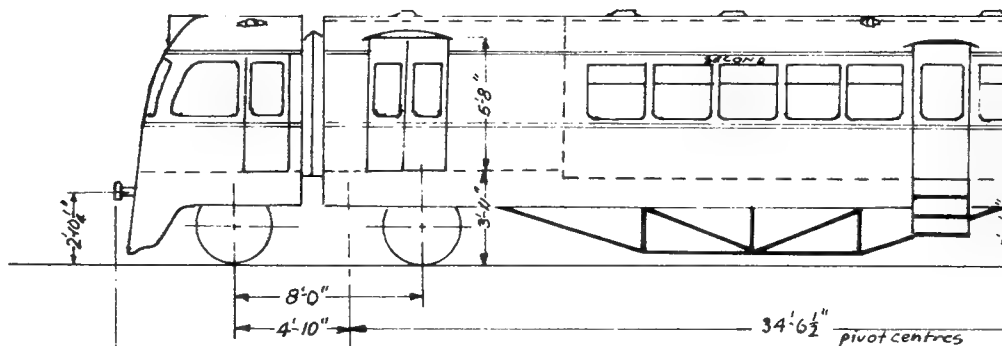
You can make a scale version of an existing or once existing steam tram. Of course you can - you can also will yourself a headache!

Please yourself - I did.

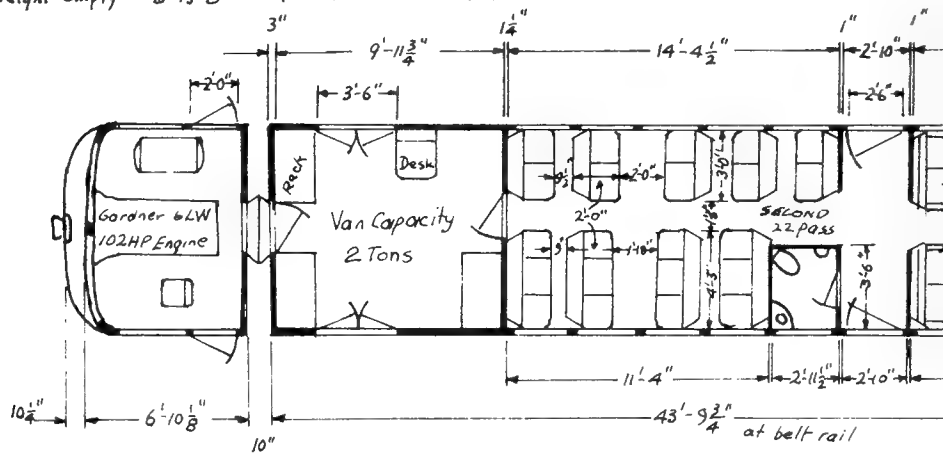
A.M.R.A. BIRTHDAY CONVENTION.

The C.O.M. is holding the AMRA 21st Birthday Convention, Easter 1972, in Melbourne.

Those members who wish to attend and have not advised the Federal Secretary please do so immediately.



Weight loaded 7-17-0 + 6-3-0 = 14-0-0. Total weight loaded 23-17-0.0
 Weight empty 6-15-0 + 4-10-0 = 11-5-0
 54'4 1/8" over couplers



Principal Specifications (Supplied by V.R.)

Tare weight 18 ton 17 cwt.
 Length Overall 54 ft 4 $\frac{1}{8}$ ins
 Height above rail level 10 ft 7 $\frac{5}{8}$ ins

CAPACITY:- (1) Small Van type

Passengers (1st class) 18
 Passengers (2nd class) 27
 45
 Van goods 25 cwt.

(2) Large Van type

Passengers (1st class) 18
 Passengers (2nd class) 22
 40
 Van goods 40 cwt.

Bogie Pivot Centres 34 ft 6 $\frac{1}{2}$ ins.

Bogie Rigid Wheelbase 8 ft 0 ins.

Wheel diameter (1) Driving - 33 ins
 (2) Trailing - 30 ins.

Number of driving wheels - 2

Tractive effort 2969 lbs (max)

Transmission: Hydraulic coupling & epicyclic gearbox

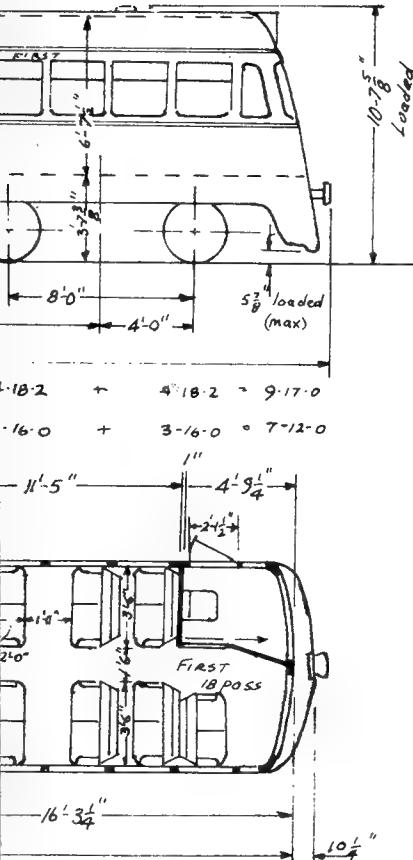
Engine: Gardner 6LW (102 H.P.)

Max permissible speed: - 45 m.p.h.

Between March 1948 & February 1950 twelve 102 H.P.

Diesel railcars were placed in service, numbered
 1"RM" to 12"RM"

Spare power unit numbered 13"RM" placed into
 service January 1955.



VR. CAR CLASS "RM"

WALKER
 102 HP. TYPE

B1-568

Prototype Station Layout

Newbridge

Photos by A. TEMPLEMAN.

by A. TEMPLEMAN.

So far in this series of articles we have considered single track stations. Now for a change we will have a look at a simple prototype for a double track through station.

The N.S.W.G.R. main western line has continuous double track as far as Kelso (147½ rail miles from Sydney) where it becomes single for the last 1½ miles into Bathurst because of the single track bridge over the Macquarie River. Between Bathurst and Orange there are two sections of double track, one of 14 miles between Gresham and Murrobo and one of 8 miles between Spring Hill and Orange. Newbridge is situated in the Gresham-Murrobo section of double track, 169½ miles from Sydney, at an altitude of 2,877 feet above sea level.

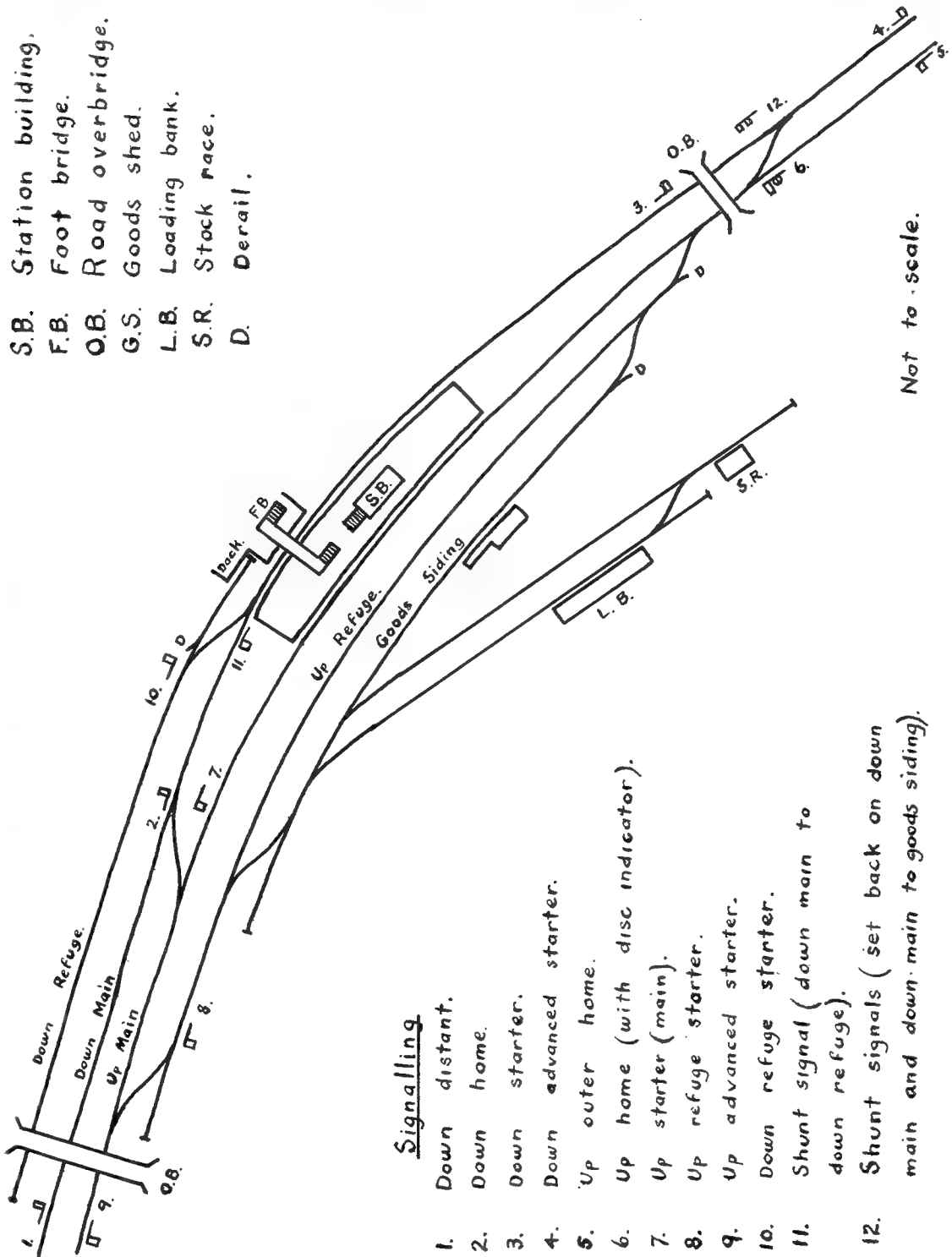
The country in this area is undulating and the railway traverses many curves, embankments and cuttings.

As can be seen in the track layout diagram Newbridge is situated on a sweeping curve and has up and down refuge sidings (the down being a dead end while the up is a loop), a loop goods siding serving a goods shed and dead end sidings serving a loading bank (much used for loading wool bales) and stock races. The line coming from Bathurst passes through a cutting under a road overbridge, crosses a shallow valley by an embankment and enters another cutting beyond the platform, passing under a second road overbridge as it leaves the yard.



Newbridge Station Building.

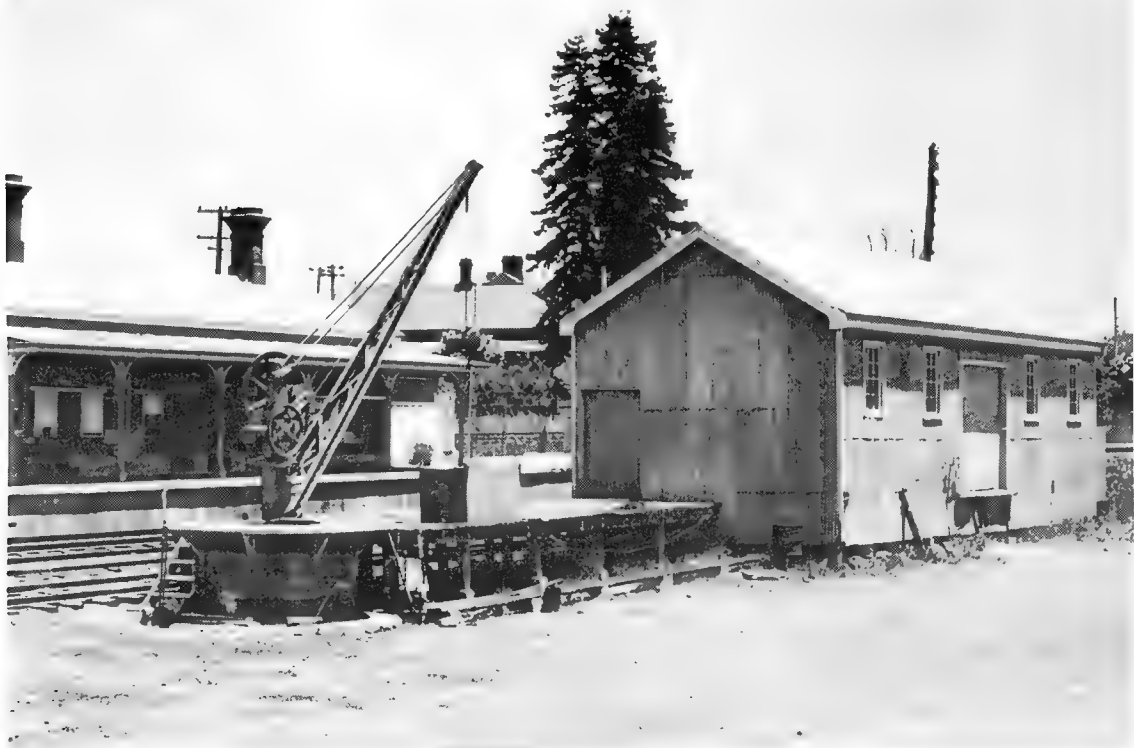
S.B. Station building.
 F.B. Foot bridge.
 O.B. Road overbridge.
 G.S. Goods shed.
 L.B. Loading bank.
 S.R. Stock race.
 D. Derail.



Signalling

1. Down distant.
2. Down home.
3. Down starter.
4. Down advanced starter.
5. Up outer home.
6. Up home (with disc indicator).
7. Up starter (main).
8. Up refuge starter.
9. Up advanced starter.
10. Down refuge starter.
11. Shunt signal (down main to down refuge).
12. Shunt signals (set back on down main and down main to goods siding).

Not to scale.



Newbridge Goods Shed.

The signalling is rather interesting, as the standard block system with manually operated lower quadrant semaphores is used for the Gresham-Newbridge section, while automatic upper quadrants are used for the Newbridge-Murrobo section. In the down direction there is a distant, home and starter (all lower quadrant) and an upper quadrant advanced starter. Coming up, there is an outer and inner home (both upper quadrant), the inner home having a disc indicator controlling entry to the up refuge and starting signals for both main and refuge and an advanced starter (the starters being all lower quadrant). There are also signals controlling movements between the down main and down refuge and down main and goods siding.

The main passenger trains serving Newbridge are the Central West Express, the Through Mail (to Dubbo) and the Forbes Mail. Now, of course, the Indian-Pacific passes through this area. There is also heavy goods traffic with many bulk wheat, stock and general goods trains as well as the interstate traffic to Sth. Aust. and West Aust. Thus for someone wanting to model a simple station with heavy main line traffic, Newbridge could be the answer.

In the latter days of steam the main locomotive classes seen through Newbridge were 36, 38, 60 and standard goods (50, 53, 55). Now with dieselisation 45, 421, 48 and sometimes 49 classes are seen.

Building four wheeled open wagons

by BOB DUNN.

Most goods stock in Australian Railways consist of a large percentage of four wheeled open wagons, therefore you will need a few on you layout.

Although this article is describing how to construct Victorian "GY" or "RY" wagons, with slight modifications it can be changed to suit vehicles of other states.

I have used tinplate for construction of my wagons; brass can also be used, but why go to the expense of brass when a few opened out tin cans or a trip to a "can" manufacturer for offcuts will do. Tinplate or brass of .010" or .011" thickness is ideal.

First of all you need a few photos of the vehicle you are going to build as well as a few dimensions. A scale drawing is not really essential, but a help. If you cannot obtain a drawing you will only have to go to the nearest goods siding and measure the wagon to produce your own plan.

For one GY truck you will need the following materials:

Tinplate or Brass.

32mm. x 19.5mm. 2 pieces wagon ends.
77mm. x 17mm. 2 pieces wagon sides.
77mm x 31.5mm. 1 piece wagon floor.
1/32" x 1/32" angle 6 pieces.
1/16" x 1/16" angle 6 pieces.
(Packets of 12 strips obtainable from various model shops.)
4 axle guards.
2 pairs 36" wheels and axles.
Various pieces copper wire.

When cutting the various pieces of sheet metal, make sure all edges are square and parallel. If you are fortunate to have access to a guillotine the cutting will be much simpler and quicker as any number of component parts can be cut with one setting of the machine.

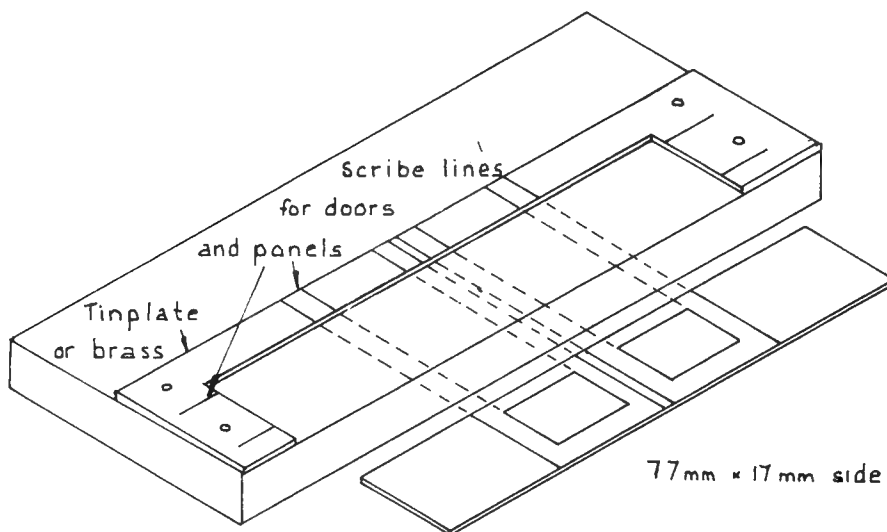
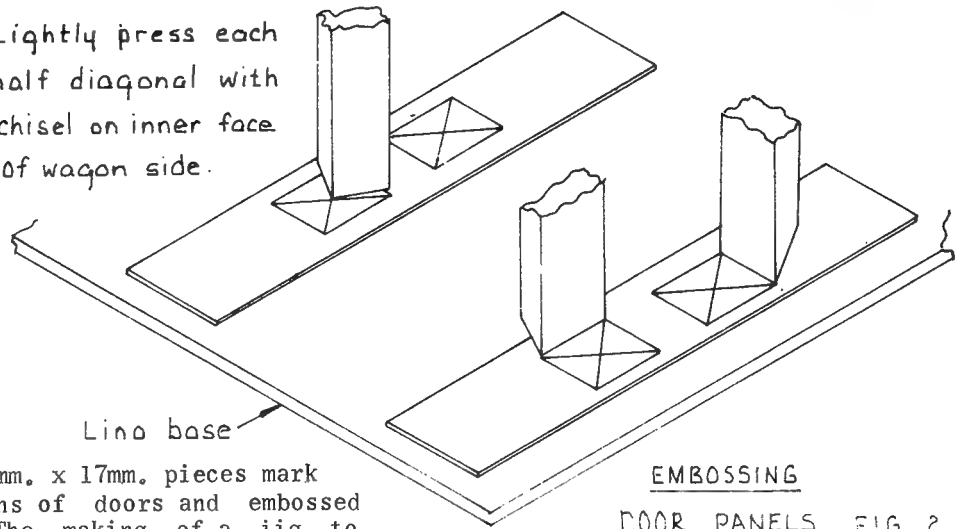


FIG. 1.

JIG FOR MARKING OUT

Lightly press each half diagonal with chisel on inner face of wagon side.



EMBOSSING

DOOR PANELS FIG 2

On the 77mm. x 17mm. pieces mark out positions of doors and embossed panels. The making of a jig to facilitate marking out, also to speed up production will be an advantage. (see figure 1).

Having marked out positions of doors, mark on reverse side of material the outline of the embossed panels of the doors, (once again the jig will facilitate in this procedure) also mark the diagonals of the panels. Now with a carpenter's wood chisel or similar sharp edged tool, lightly press on each half diagonal applying slightly more pressure at the centre than outside. Repeat for each half diagonal. It would be advisable to have a few practice

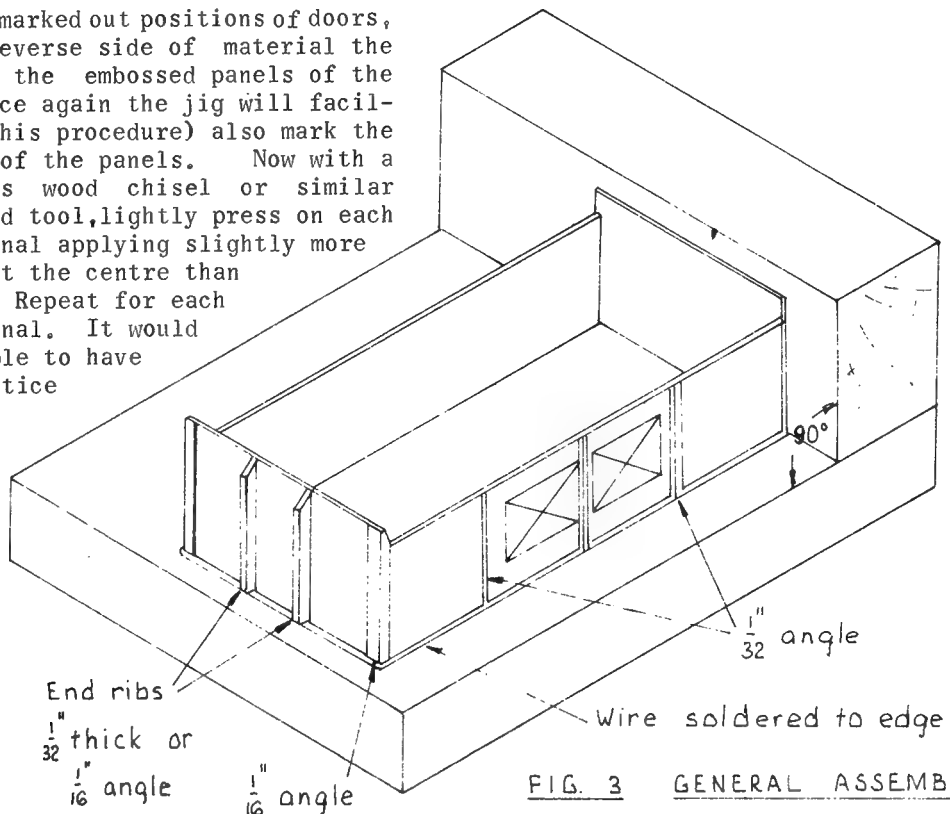


FIG. 3 GENERAL ASSEMBLY

runs on some scrap pieces of material to get the desired effect. Using a similar tool or chisel, go around the edge of the embossing on opposite side of the material i.e. outside of truck side to accentuate the panel. Figure 2 will probably explain this better than words. The use of a lino base when embossing the panels will result in sharper outlines.

During embossing the doors, you will find the truck sides have slightly buckled, but don't worry as the sides can be straightened later or left in the buckled state for added realism.

Soldering the pieces together is no problem provided the top edges of the ends and sides are kept in line and the corners square. I have found two pieces of wood fastened together to form a right angle invaluable when assembling the body. The sides of the truck are soldered onto the ends, i.e. the ends cover the thickness of the wagon sides. Solder sides and ends together. The floor fits in between sides and ends. A rub on the edge with a file may be necessary to fit floor. Solder in position. (See figure 3.).

The rolled top of the sides and end can be represented by soldering a strand of copper earth wire along top of wagon. First straighten the wire. Grip one end on the vice and gently pull the other end with a pair of pliers. A long length two or three

feet is much easier to straighten than a short length. Stand the wagon body upside down on a flat surface and starting at one corner solder wire along one side making sure it is kept in contact with the side, bend at corner and continue around rest of body.

Slightly round off the corners formed by sides and ends by gently filing and solder on 1/16" x 1/16" angle keeping angle tight up to wired edge along top.

To simulate the doors solder the 1/32" x 1/32" angle strip along door edges making sure they are kept square to top and bottom edges. The ends of these wagons are strengthened by pressed metal ribs or angle sections. On the model these can be reproduced by 1/16" x 1/16" angle or a heavier gauge brass strip approx. 1/32" thick filed to shape and soldered into position - two required at each end.

The underframe on prototype is a channel section, but for sake of simplicity an angle section will suffice. On the 77mm. x 5mm. strips scribe a line along the strip 1/8" from the edge. Place the strip in the vice keeping the scribed line in line with the top edge of the vice jaws, this will leave approx. 1/16" gripped in the jaws. With the blade of a screw driver bend over at right angles to form an angle. (See figure 4.)

Axle guards of your choice can be fitted, but GY type made by BPR are correct in size and detail for GY and RY vehicles. These can be obtained from Model Dockyard, Melbourne.

One the underside of the floor mark centreline of wagon, also axle centres. To line up the wheels and to see that axles are parallel, I have adopted the following method: Smear a small amount of "Pliobond" on each axle guard and on floor of truck where axle guards are located. Fix axle guards on one side of

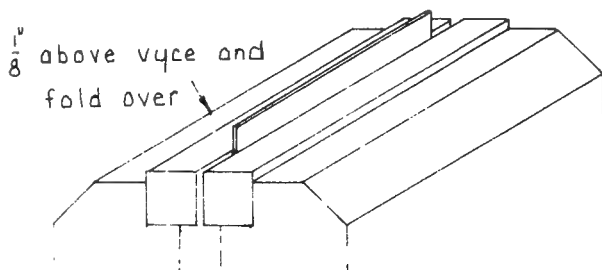


FIG 4 MAKING CHANNEL

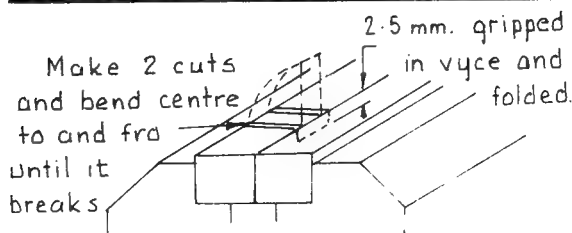


FIG 5 MAKING SHUNTERS STEP

vehicle seeing that they are correctly located. Insert wheels and axles and position axle guards on other side of truck. On top of a laminex table or other suitable flat surface push the truck to see if it runs a straight line, if so well and good, but if not adjust the axle guards until straight running is achieved. "Pliobond" being reasonable slow drying allows time for adjustment of axle guards before final fixings by soldering to floor of wagon. Only a small spot of solder on each corner of each guard is sufficient. The angle strip previously folded to shape can now be fitted and soldered into position.

Shunters steps are made from strips of tinfoil 10.5mm x 5 mm. wide. Scribe a line across the strip 2.5mm. from one end and place in vice down to

the scribed line, leaving 8mm. above the jaws. Bend over at right angles and keeping 1mm. in from each side make two saw cuts. Leaving the whole in the vice bend the centre section backwards and forwards until it breaks off. Remove from vice and you have a step ready to solder in position. (See figure 5.).

The hand brake lever can be formed out of 1/32" boiler band as well as the hand brake ratchet.

I will not cover any further detailing as the amount of detail required is to the choice of the individual modeller. It is surprising how much detail can be left off without being missed by the critical eye.

I have painted my wagons with red primer surfacer as used on motor car bodies by panel beaters and any obliging panel beater will fill a small vegemite jar without charge.

Primer surfacer is thick and gooey, and can be thinned down with lacquer thinners. Spraying is the best method of application, but I have also seen very good results by applying with a brush, but this takes some practice.

Association Competitions

The following are details of the Association's competitions:

LOCO COMPETITION SECTION 1: The Tim Dunlop Cup - a perpetual trophy. Held for one year and then replaced by a replica.

Scratch built locomotive, with the exception of motors, wheels and small fittings, any scale, of any prototype locomotive, past or present, whether Steam, Diesel, Electric, Rail Bus, or Railcar. Proprietary items used are to be listed with each entry.

ROLLING STOCK COMPETITION SECTION 1
The N.S.W. Branch Trophy for any item of Australian Rolling Stock, any scale scratch built, except for wheels, bogies and couplers.

ROLLING STOCK COMPETITION SECTION 2
The Victorian Branch Trophy for the conversion, alteration, or modification of any commercial product or model to represent any prototype vehicle. Each entry must include the name of the company from which the model is copied, plus the names of the commercial products used.



FOR READER'S LETTERS

The Editor,
AMRA Journal.

Dear Sir,

Several people have said that there is little benefit in being a member of AMRA. I could advance many good reasons for being a member, but one in particular is "Fellowship".

In April I visited Sydney and Melbourne on my holidays. I attended AMRA Branch meetings in both states and could not have been welcomed more if I had been giving away free locos. I was invited home to dinner several times and saw quite a few layouts. This is one benefit of being a AMRA member and a very good one.

The Editor, ARTHUR ROBINSON.
AMRA Journal.

Dear Sir,

I cannot answer Frank Sibson's letter about deceased estates (Pop Valve Nov/Dec. '70), but as I have been involved with this problem twice recently, other members may derive some benefit from my experience.

Each of these estates contained many items that I would like to have purchased, but I did not want to leave any impression that I was trying to buy at below a fair price. Thus, I listed the items and beside each one I wrote two prices:

(a) one that I considered to be a fair sale price and was up to about 50% of current new price, but reduced by poor

condition or unpopularity.

(b) a price which if no better offer is received, I would pay myself or I would be quite certain to find a buyer through club contacts.

This scheme protects the owner against selling at ridiculously low prices, protects the adviser against any accusation of unfair practices and gives the adviser a chance to buy on "auction" principles. The owner is then advised to place an ad. in a local paper or the main city "classified ad." paper, with some idea of the wording such as "Triang Trains, 10' locos, 50 rolling stock, many others Deceased Estate" followed by telephone number, address and times suitable. The words "Deceased Estate" usually attract lots of buyers and should always be included.

Incidentally, the first lot was sold without my getting one item and the second is still to be advertised, but at least I had the satisfaction of helping an old friend and assured that they did not sell at unfairly low prices.

ALLAN DOWEL.

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Branch Reports

QUEENSLAND.

The Queensland Branch still exists and meets on the 1st and 3rd Thursdays of the month. The first 1971 meeting will be Thursday, 4th February.

The Branch has layouts in HO and HO_N3½ and also Sn3½. We have a good library and a well equipped lathe and accessories.

We look forward to seeing all Brisbane members at the meetings in the new year. There are many interesting meetings planned so do not miss them.

As we are unable to hold our meetings at the "Trocadero", please contact me at 142 Northgate Road, Northgate, 4013.

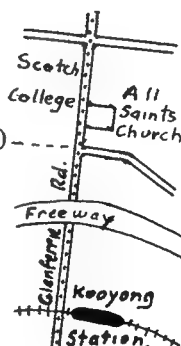
ARTHUR ROBINSON.

VICTORIA.

Meetings are held at All Saints Church Hall, Glenferrie Road, Kooyong.

(opposite Scotch College) Commencing at 8.0 pm. on the second Thursday, of each month, except January.

JOHN SNEDDON.
(Hon Secretary)
Phone 49-2799.



The Victorian Branch meeting in December was an outstanding social success. This being the Christmas meeting was a get-together of members. It was a pleasure to have the company of a Past Federal Secretary, Cedric Rolfe, with us; even more so when our President, Mal Baker, presented Cedric with his Honourary Life Membership Badge on behalf of the Federal Committee.

An additional item of entertainment

was given by Fyfe Thorpe showing a film on steel making by B.H.P.

1970 has been a year of achievement for the Victorian Branch with modelling competitions each second month and our first model railway exhibition.

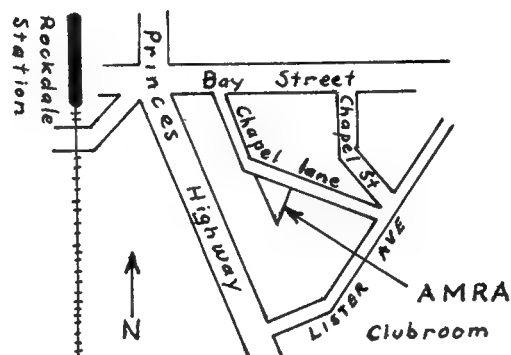
Further modelling competitions are planned for 1971 together with another Model Railway Exhibition during Moomba, March 5th to 8th at the Camberwell Civic Centre. (See adv. page (vi)).

Would those members who have not yet offered their services at the exhibition, please advise Mal Baker (36-8829) with dates and times when you can help.

Visit the Exhibition and make yourselves known to the members there, particularly visitors from the country and interstate.

JOHN SNEDDON.

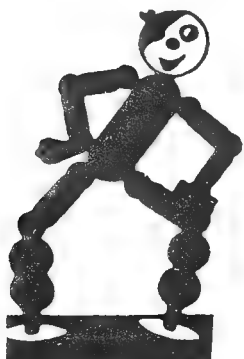
NEW SOUTH WALES.



New South Wales Branch holds meetings regularly at their club rooms. For details contact the Secretary, Phil Kelly (70-5317).

The next meeting is Saturday, 6th February (Annual General Meeting). Members, this is your opportunity to hear about your branch first hand and also to assist the committee in advancing the branch. Therefore all members are requested to be present.

COL. GILBERTSON.



Tim The Toyman

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MT-1041) Converts Atlas Locos to Kadee	5.70
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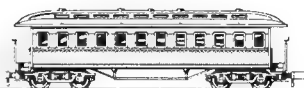
ARNOLD *rapido* N Gauge



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0361



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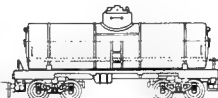
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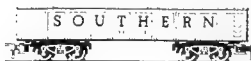
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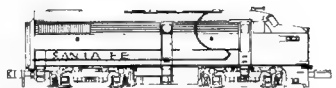
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0416



0489



0274

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0214	B&O F-P9 Diesel Electric, dummy unit	5-00
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0361	Western & Atlantic Combine, Cream & Green, length 88mm	3-65
0362	Western & Atlantic Coach matching 0361	3-65
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0416	Southern Bogie Gondola (Silver)	2-25
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0482	Union Pacific Stock Car, (Brown)	2-75
0484	USA Bogie Tank Car, I-dome, Shell	2-75
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0211	Nthn. Pacific FP9 Diesel, powered	16-95
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0273	SOO GM GP30 Diesel Electric Loco	15-75
0381	TEE (Trans-Europe Express) Compartment Coach 1st, Red & Cream, 162mm long	4-50
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0383	TEE Bar-Lounge Car 1st., 162mm (TEE Cars are internally fitted)	4-50
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0404	UP High Cube Box Car, 158mm long	3-75
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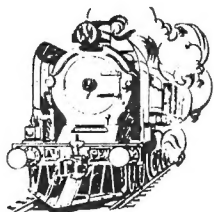
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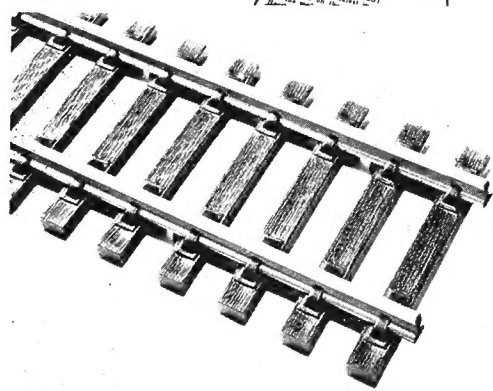
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Many modellers are now looking to N Gauge and they are attracted to the gauge because of the fine-looking PECO trackwork available. In N Gauge, track should be fastened down and not be allowed to float as it may do in HO/00 and larger.

Look to the list of well-priced Track, Pointwork and accessories in HO/00 and N Gauge. Then see your regular hobby shop and actually see these products. (Due to soaring copper and nickel prices some increases are inevitable.)

	TRACK		
HO/00	Streamline Track with Nickel Silver Rail	1 yard	1.25
SL-100X	Streamline Track w/Brass Rail	1 yard	1.10
SL-100B	Streamline Track with Bright Steel Rail, sleeper-base slotted for Tri-ang Accessories	1 yard	1.00
SL-100S	Streamline Track with N.S. rail and concrete sleepers	1 yard	1.25
	POINTS		
SL-84X	Catch Point, Right Hand	each	1.85
SL-85X	Catch Point, Left Hand	each	1.85
SL-86X	Curved Point, right hand	each	3.15
SL-87X	Curved point, left hand	each	3.15
SL-88X	Right hand Point, 5ft. rad.	each	2.95
SL-89X	Left hand point, 5ft. rad.	each	2.95
SL-91X	Right hand point, 2ft. rad.	each	2.35
SL-92X	Left hand point, 2ft. rad.	each	2.35
SL-93X	Short crossing (24°)	each	2.35
SL-94X	Long crossing (12°)	each	2.95
SL-97X	Y Point	each	2.35
	TRACK FIXINGS		
SL-10X	Metal rail joiners	Pkt of 24	.40
SL-11	Insulating rail joiners	Pkt of 12	.35
SL-14	Track fixing pins	1/4oz.	.40
SL-17	Stud contact strip for track	6 ft.	.55
SL-18	Stud contact strip for points	4 ft.	.55
SL-30	Uncouplers A/H/D type	each	.55
SL-32	Ballast Slopes - cork	two	.55
SL-37	Track Cleaning Block	each	.40
SL-40	Buffer stop kit — rail built	each	.35
SL-41	Buffer stop kit — sleeper built	each	.40
	FOAM BALLAST UNDERLAY		
SL-50	— for Track	Roll of 16 1/2 ft.	1.45
SL-51	— for R/Hd points SL-91X	two	.65
SL-52	— for L/Hd points SL-92X	two	.65
SL-53	— for Y points SL-97X	two	.65
SL-54	— for short Xings SL-93X	two	.65
SL-55	— for R/Hd points SL-88X	two	.65
SL-56	— for L/Hd points SL-89X	two	.65
SL-57	— for long crossing SL-94X	two	.65
SL-58	— for double slip SL-90X	two	.65
SL-66	— for R/H curved point SL-86X	two	.65
SL-67	— for L/H curved point SL-87X	two	.65

If your dealer is stumped, he is invited to, or you may, write to us for supplies.

AUSTRALIAN MODEL CRAFT CO.,

BOX 118, P.O. ALBURY, N.S.W. 2640

Phone: Albury 21-2473

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Telegrams: AMRIANA, Albury.